

Features

Frequency range: 150 MHz to 230 MHz

Meets CISPR 16-1-2 requirements

For testing unscreened balanced lines

Individual calibration

Three Year Warranty



Description

Com-Power CDN-T4E is part of a series of Coupling/Decoupling Networks designed specifically for testing product for conducted immunity per IEC 61000-4-6.

The CDN-T4E series is for used for testing products that uses a cable with 2 pairs unscreened balanced conductors for communication, such as ethernet. The CDN-T4E has a RJ45 connector for both EUT and AE connection.

The RF disturbance signal is injected using a BNC-connector which can handle up to 40 V of input. The bottom surface of the CDN is not painted, so that it be properly grounded during the test.

All Com-Power CDNs can be purchased seperately or part of the CIS series conducted immunity test system. The test system includes the ACS series power amplifier and accessories required to conduct the immunity testing.

All Com-Power CDNs are individually calibrated. The Com-Power CDN-T4E fully complies with the requirement contained in the IEC 61000-4-6 and CISPR 16-1-2.

Application

During conducted Immunity testing, CDNs are utilized to provide a means of coupling RF common mode signals to each pair of unscreened lines within the cable. In addition, CDNs provide required common mode impedance between each pair of lines and ground, minimize interference to the auxillary equipment via common mode decoupling of the disturbing signals and provide uninterrupted path for the signalst from the auxillary equipment to the EUT.

Before you begin testing with the CDN-T4E you will need to establish a calibrated drive levels corresponding to your desired test levels. During drive level calibration the RF signal level being injected to the CDN is adjusted incrementally until the voltage level measured at the 150Ω to 50Ω adapter (ADA-515) connected to the EUT port is approximately equal to the Umr value given in table below. The ADA-515 and ccessories that are needed for this test is also available from Com-Power.

Test Levels Open Circuit Voltage	Open Circuit Voltage @ Umr
1	0.167
3	0.5
10	1.67

Umr= Voltage level measured at the output of the 150Ω to 50Ω adapter (ADA-515)

Specifications

Product Name	Coupling Decoupling Network (CDN)
Compliant Test Standards	IEC -61000-4-6, CISPR 16-1-2
Frequency Range	150 kHz to 230 MHz
Max Input Voltage	40 V
Application	Cable with 2 pairs unscreened balanced conductors
Current rating	2 Amps
Voltage rating	160 VAC
RF Input Connector	50 Ω BNC (female)
I/O Connections	RJ 45
Common mode impedance	550 kHz - 26 MHz: 150 Ω \pm 20 Ω 26 MHz - 80 MHz: 150 Ω + 60 Ω / - 45 Ω 80 MHz - 230 MHz: 150 Ω + 60 Ω / - 60 Ω
Voltage Division Factor	9.5 dB +4 / -1 dB
Dimensions	8.5 x 4.5 x 3.5 inches 21.5 x 11.4 x 8.8 cm
Weight	2 lbs. 0.9 kg
Accessories Available from Com-Power for setting test levels and running the test	ADA-T4/T8 shorting adapters ADA-515-2 150 Ω to 50 Ω adapters TEP-050 50 Ω Terminator ATTN-6-100W Power Attenuator DCU-300-100W Directional Coupler ASC series Power Amplifiers



Shorting Adapter Set ADA-T4/T8



ADA-515-2 Adapter Set



TEP-050 Terminator

All values are typical values unless otherwise specified.
Specifications are subject to change without notice.

Typical Data

